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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,811	07/09/2003	Samson Mkrtchyan	03226.000104.	2272
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ZHU, RICHARD Z				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/616,811

Applicant(s)

MKRCHYAN ET AL.

Examiner

RICHARD Z. ZHU

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-28 and 86-91 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-28 and 86-91 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date 11/05/2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Acknowledgement

1. Acknowledgement is made of applicant's amendment made on 11/05/2008. Applicant's submission filed has been entered and made of record.

Status of the Claims

2. Claims 23-28 and 86-91 are pending. Claims 1-21 and 29-85 are cancelled. Claims 23-28 are currently amended. Claims 86-91 are newly presented.

Response to Applicant's Arguments

3. Per Claims 23-24 and 26-27, Applicant's arguments in light of amended limitations are persuasive. Previous grounds of rejection are vacated in light of a new ground of rejection.

Per Claims 25 and 28, the examiner disagrees with applicant's assessment. The step of "determining the status of a communication link to a host via the communication port" is at least taught by *Reilly* (Col 6, Rows 13-24, **IDP emulator for detecting incoming communication from a newly connected host**, see also Col 5, Rows 32-42. Col 4, Rows 45-60, **transfer status of the communication link between the printer and a plurality of peripherals to the host via the communication port**); transmitting the status of the network printer to the host, which was previously connected before communication link is interrupted in order to connect to another host, when the communication link is reestablished (Col 6, Rows 52-55, **call back the host computer that requested the first print job**. Col 4, Rows 50-56, **said call back process includes current status of the printer pertaining to various**

updated parameters). *Reilly* does not appear to disclose locking the status of the printer in non-volatile memory when the printer determines the communication link is interrupted. *Stockdale* discloses locking or storing in a nonvolatile memory status information of a gaming machine printer (**Col 10, Rows 45-58**). This feature is implemented in anticipation of possible malfunctions so that critical information such as current status of the printer is not lost. Since *Reilly* already disclose sending update status to a previously connected host when communication link is re-establish, there is an implicit teaching that said status is stored somewhere in the network printer. *Stockdale* provides an explicit teaching of how this status information pertaining to a printer is stored in such a way that one of ordinary skill in the art at the time of the invention would be motivated to store the status information of *Reilly* in the manner taught by *Stockdale*, storing it in a non-volatile memory.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 25 and 28 are rejected under 35 USC 103(a) as being unpatentable over *Reilly (US 6401150 B1)* in view of *Stockdale et al. (US 6503147 B1)*.

Regarding the apparatus of Claim 25 and therefore method of Claim 28, *Reilly*
discloses a network machine printer (**Fig 6, Printer 410 and see Col 9, Rows 10-20**),
comprising:

a processor (Fig 6, CPU 416);

a communication port coupling the network machine printer to an external host (Fig 6, ROM 412 and see Col 9, Rows 12-15, ROM being used to implement network layer architecture shown in Col 5, Rows 5-15 for providing an interface for a plurality of IDP ports that connects to a plurality of host computers 400 over the network);

a memory coupled to the processor, the memory having program instructions executable by the processor stored therein (Fig 6, ROM 412 and see Col 9, Rows 12-15, ROM being used to implement network layer architecture using a UNIX based program, see Col 5, Rows 15-25), the program instructions comprising:

determining the status of a communication link to the host via the communication port (Col 6, Rows 13-24, IDP emulator for detecting incoming communication from a newly connected client, see also Col 5, Rows 32-42. Col 4, Rows 45-60, transfer status of the communication link between the printer and a plurality of peripherals to the host via the communication port); and

storing the status of the network printer in a memory when the network machine printer determines that the communication link is interrupted (Col 6, Rows 40-55 and Col 4, Rows 45-60. Reconnecting to a previously connected host where the host request status information of the network printer requires said status information being implicitly saved in a memory of some sort);

transmitting the status of the network machine printer to the host when the communication link is reestablished (Col 6, Rows 52-55, call back the host computer that

requested the first print job. Col 4, Rows 50-56, said call back process includes current status of the printer pertaining to various updated parameters);

Reilly does not disclose the network printer being a gaming machine printer connected to a game controller and locking the status of the gaming machine printer in the non-volatile memory when the gaming machine printer determines that the communication link is interrupted.

Stockdale discloses a gaming machine printer connected to a gaming controller (**Fig 2, Printer 238 connected to the main cabinet 4 of gaming machine 2 shown in Fig 1 having a master gaming controller 200, see Fig 2 and Col 6, Rows 20-24**) connected to a processor (**Figs 2-3, Peripheral Controller 234 and Control Microprocessor 312**) having program instructions executable by the process stored within a memory (**Col 11, Rows 1-10**) for notifying the gaming controller its current peripheral configurations and status information (**Col 11, Rows 10-20 and Rows 55-65**) via an established communication port (**Fig 2, Hub 230**).

Stockdale further discloses locking in a memory status information of a gaming machine printer when it is determined that a communication link with a peripheral is interrupted (**Col 15, Row 60 – Col 16, Row 5, interrupting communication link to a first host or peripheral to connect to a second host or peripheral. Col 16, Rows 40-55, logging error status of the printer peripheral when communication link with a peripheral is interrupted naturally requiring saving said log into some sort of memory**).

Stockdale suggested that storing in a non-volatile memory status information of the gaming machine printer ensures that in the event of some critical malfunction (**Col 17, Row 60 – Col 18, Row 8**) such as loss of communication link with a functioning peripheral (**Col 17, Rows 1-20**) ensures critical status information is not lost.

One of ordinary skill in the art, facing with the problem that either a critical event such as communication link interruption due to component or peripheral failures or non-critical event such as communication link interruption due to standard operation to connect to another peripheral or host could occur at anytime, would look to *Stockdale* for solution since it suggested storing status information of a printer in non-volatile memory would ensure such information be preserved for future use; for example, when reconnecting to a previously connected host and said host requests status update of the printer as taught by *Reilly*.

It would've been obvious to one of ordinary skill in the art at the time of the invention was made to implement the network printer of *Reilly* as the gaming machine printer of *Stockdale* connected to a gaming controller as a client host so as to execute printing operations for the plurality of peripheral devices and the gaming controller to save in non-volatile memory status information of the gaming machine printer when a malfunction such as interrupted communication link occurs whereas the motivation would've been to provide an advantageous network gaming machine printer where network traffic is advantageously reduced (*Reilly*, **Col 7, Rows 64-67**) and in event of malfunctions during a certain on going operation, critical status information can be used to determine the state or status of the gaming machine before the interruption (*Stockdale*, **Col 18, Rows 5-8**).

6. Claims 23-24, 26-27 and 86-91 are rejected under 35 USC 103(a) as being unpatentable over *Reilly (US 6401150 B1)* in view of *Traw (US 6009527 A)* and *Stockdale et al. (US 6503147 B1)*.

Regarding the apparatus of Claim 23 and therefore method of Claim 24, *Reilly* discloses a network machine printer (Fig 6, Printer 410 and see Col 9, Rows 10-20), comprising:

a processor (Fig 6, CPU 416);

a first communication port coupled to the processor (Fig 6, ROM 412 and see Col 9, Rows 12-15, ROM being used to implement network layer architecture shown in Col 5, Rows 5-15 for providing an interface for IDP ports that connects to a plurality of host computers 400 over the network);

a second communication port coupled to the processor (Fig 6, ROM 412 and see Col 9, Rows 12-15, ROM being used to implement network layer architecture shown in Col 5, Rows 5-15 for providing an interface for IDP ports that connects to a plurality of host computers 400 over the network) for connection to a host computer (Fig 1, Host 1₀ to 1_n);

a memory coupled to the processor, the memory having program instructions executable by the processor stored therein (Fig 6, ROM 412 and see Col 9, Rows 12-15, ROM being used to implement network layer architecture using a UNIX based program, see Col 5, Rows 15-25), the program instructions comprising:

determining when an external device is coupled to the first communication port (**Col 6, Rows 13-24, IDP emulator for detecting incoming communication from a newly connected client, see also Col 5, Rows 32-42**);

notifying by the network machine printer the host computer coupled to the second communication port when the external device is coupled to the first communication port (**Col 6, Rows 45-55, sending asynchronous status updates to clients include previously connected host, said status update includes number of elements within print queue 82, information indicative of various other clients who had established communication session with the network printer; see Col 4, Rows 45-56**); and

disconnecting communications by the network machine printer from the host computer (**Col 5, Rows 40-41, a close call for closing existing connections. Col 6, Rows 40-50, client server connection is established by closing the connection to previous connected host, negotiate the port from which current client/server will communication with the network printer, complete the request from client/server, close said connection and reconnect to previously connected host**);

establishing by the network machine printer a communication session with the external device (**Col 6, Rows 40-45, negotiating a port connection between the network printer and a requesting client**);

reporting the communication session to the host when the communication session is completed and communications are restored to the original host computer (**Col 6, Rows 45-55. After the printing request is completed and hence the communication session ended,**

the printer reconnects with the previous host to provide asynchronous update reporting various parameters of previous communication session, Col 4, Rows 35-56).

Reilly does not disclose the network printer being a gaming machine printer connected to a gaming controller as a trusted host to the gaming machine printer as well as establishing a trusted communication session between the gaming controller and the gaming machine printer.

Stockdale discloses a gaming machine printer connected to a gaming controller (**Fig 2, Printer 238 connected to the main cabinet 4 of gaming machine 2 shown in Fig 1 having a master gaming controller 200, see Fig 2 and Col 6, Rows 20-24**) connected to a processor (**Figs 2-3, Peripheral Controller 234 and Control Microprocessor 312**) having program instructions executable by the process stored within a memory (**Col 11, Rows 1-10**) for notifying the gaming controller its current peripheral configurations and status information (**Col 11, Rows 10-20 and Rows 55-65**) via an established communication port (**Fig 2, Hub 230**).

It would've been obvious to one of ordinary skill in the art at the time of the invention was made to implement the network printer of *Reilly* as the gaming machine printer of *Stockdale* connected to a gaming controller as a client host so as to execute printing operations for the plurality of peripheral devices and the gaming controller controlled machine connected to the printer over the network whereas the motivation would've been to provide an advantageous network gaming machine printer where network traffic is advantageously reduced (*Reilly*, Col 7, Rows 64-67).

The combined teachings do not disclose the gaming machine printer connected to the gaming controller as a trusted host to the gaming machine printer as well as establishing a trusted communication session between the gaming controller and the gaming machine printer.

Traw discloses a computer on a network implementing network security when establishing communication sessions with peripheral or external devices on the network (**Fig 1 and see Abstract**) wherein in order for the peripheral to establish communication with the computer, it must establishes a trusted communication session so that the computer would recognize said peripheral as a trusted host to the computer (**Col 3, Rows 15-20, inherent trust is established by computer's operating system and processor awareness of peripheral's connection to the computer. Col 3, Row 55 - Col 4, Row 12, once a peripheral successfully survive the various authentication protocols, peripheral may gain access or established a trusted communication session with the computer as a trusted host to the computer**).

It would've been obvious to one of ordinary skill in the art at the time of the invention to modify the processor of the combined teachings with the authentication protocols of *Traw* to establish the external device as a trusted host to the gaming machine printer whereas the motivation would've been to provide security from unwanted intrusions (*Traw*, **Col 1, Rows 54-58**).

Regarding the apparatus of Claim 27 and therefore method of Claim 26, *Reilly* discloses a network machine printer (Fig 6, Printer 410 and see Col 9, Rows 10-20), comprising:

a processor (Fig 6, CPU 416);

a plurality of communication ports coupled to the processor (Fig 6, ROM 412 and see Col 9, Rows 12-15, ROM being used to implement network layer architecture shown in Col 5, Rows 5-15 for providing an interface for IDP ports that connects to a plurality of host computers 400 over the network);

a memory coupled to the processor, the memory having program instructions executable by the processor stored therein, (Fig 6, ROM 412 and see Col 9, Rows 12-15, ROM being used to implement network layer architecture using a UNIX based program, see Col 5, Rows 15-25) the program instructions comprising:

for each of the plurality of communication ports, determining if a host is coupled to the communication ports (Col 6, Rows 13-24, IDP emulator for detecting incoming communication from a newly connected client, see also Col 5, Rows 32-42);

establishing the communication port as a native communication port to the host when the host is detected on the communication port (Col 6, Rows 40-45, negotiating a port connection between the network printer and a requesting client).

***Reilly* does not disclose the network printer being a gaming machine printer connected to a gaming controller as a trusted host to the gaming machine printer as well as**

establishing a trusted communication session between the gaming controller and the gaming machine printer.

Stockdale discloses a gaming machine printer connected to a gaming controller (**Fig 2, Printer 238 connected to the main cabinet 4 of gaming machine 2 shown in Fig 1 having a master gaming controller 200, see Fig 2 and Col 6, Rows 20-24**) connected to a processor (**Figs 2-3, Peripheral Controller 234 and Control Microprocessor 312**) having program instructions executable by the process stored within a memory (**Col 11, Rows 1-10**) for notifying the gaming controller its current peripheral configurations and status information (**Col 11, Rows 10-20 and Rows 55-65**) via an established communication port (**Fig 2, Hub 230**).

It would've been obvious to one of ordinary skill in the art at the time of the invention was made to implement the network printer of *Reilly* as the gaming machine printer of *Stockdale* connected to a gaming controller as a client host so as to execute printing operations for the plurality of peripheral devices and the gaming controller controlled machine connected to the printer over the network whereas the motivation would've been to provide an advantageous network gaming machine printer where network traffic is advantageously reduced (*Reilly, Col 7, Rows 64-67*).

The combined teachings do not disclose the gaming machine printer connected to the gaming controller as a trusted host to the gaming machine printer as well as establishing a trusted communication session between the gaming controller and the gaming machine printer.

Traw discloses a computer on a network implementing network security when establishing communication sessions with peripheral or external devices on the network (**Fig 1 and see Abstract**) wherein in order for the peripheral to establish communication with the computer, it must establishes a trusted communication session so that the computer would recognize said peripheral as a trusted host to the computer (**Col 3, Rows 15-20, inherent trust is established by computer's operating system and processor awareness of peripheral's connection to the computer. Col 3, Row 55 - Col 4, Row 12, once a peripheral successfully survive the various authentication protocols, peripheral may gain access or established a trusted communication session with the computer as a trusted host to the computer**).

It would've been obvious to one of ordinary skill in the art at the time of the invention to modify the processor of the combined teachings with the authentication protocols of *Traw* to establish the external device as a trusted host to the gaming machine printer whereas the motivation would've been to provide security from unwanted intrusions (*Traw*, **Col 1, Rows 54-58**).

Regarding Claims 86-91, *Reilly* discloses the plurality of communication port or first and second communication port are communication ports selected from the group including a serial port, a parallel port, a Universal Serial Bus (USB) port and an Ethernet port (**Col 5, Rows 50-65, parallel port**).

Conclusion

7. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Richard Z. Zhu whose telephone number is 571-270-1587 or examiner's supervisor King Y. Poon whose telephone number is 571-272-7440. Examiner Richard Zhu can normally be reached on Monday through Thursday, 0630 - 1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197

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(toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RZ²
12/12/2008

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